Special Articles and Association Notes

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Executive Meeting

Minutes of a Meeting of the Executive of the Manitoba Medical Association held in the Medical Arts Club Rooms on Thursday, July 9th, 1936, at 12.30 p.m.

Present.

Dr. F. G. McGuinness — Dr. E. S. Moorhead
Dr. A. S. Kobrinsky — Dr. O. C. Trainor
Dr. W. E. R. Coad — Dr. S. G. Herbert
Dr. F. A. Benner — Dr. F. W. Jackson
Dr. W. Harvey Smith, by invitation.

This meeting was called for the purpose of considering a communication received from the Workmen's Compensation Board re. appointments to the Special Committee of the Board. Names were suggested.

Moved by Dr. S. G. Herbert, seconded by Dr. F. A. Benner: That these names form the basis of the names submitted, but that the President and the Secretary view the list of members and pick out any more that have not been thought of. —Carried.

Re. C.M.A. Executive Meeting at Victoria.

Dr. Moorhead gave a report on the meeting of the Executive of the C.M.A. at Victoria and spoke at considerable length on the question of federation. He stated it had been decided by the Executive that each Province appoint a committee to consider Federation and that one member of the committee should be the Provincial representative on the Committee on Federation of the C.M.A., so that each Provincial Committee's deliberations would be taken to the next Executive meeting of the C.M.A.

Dr. Moorhead also spoke on the survey of medical services amongst the unemployed in Winnipeg and asked that certain accounts which had been contracted in the rent of a calculator, engaging a stenographer and reprints, be paid.

It was moved by Dr. O. C. Trainor, seconded by Dr. A. S. Kobrinsky: That these accounts be paid. —Carried.

Re. Accounts for Travelling Expenses.

The secretary brought forward an account for travelling expenses for two speakers at one of the district society meetings. After considerable discussion the secretary was instructed to revise the account and pass it for payment. He was also instructed to pay account submitted by Dr. Geo. Clingan.

Re. Voluntary Health Insurance.

Dr. W. Harvey Smith was present by request and submitted a report on a proposed trial of voluntary health insurance as follows:

Gentlemen:—

For many years, as you are aware, I have been concerned with the economic future of medicine, as I have felt that fundamental changes in the basis upon which medical services would be supplied to the public were in process of evolution, and that if organized medicine continued to adopt a laissez faire towards the currents of thought, and the attitude of legislatures and peoples on the economic relationship of our profession towards the public, we would of a certainty find that the control of our own destiny had passed to other hands, with results that might debase the practicing physician to the level of an employee of a beaurocratic system, with all that such a status involved in lack of independence and of earning power. That I may be included properly among the minor prophets, I would question, yet there is every satisfaction to be derived by an individual, be he never so humble, by being able to say, "I told you so." I need not stress the progress that has been made in the development of systems of socialized medicine throughout the world, and especially in our own country, since I essayed the role of a prophet six years ago. We have gone far in Canada, especially in the three provinces west of Manitoba, in the development of plans for supplying medical services to the public under the auspices of the state.

That such services may be operated to the advantage of the public and even of our profession has been demonstrated in many countries, and more recently in Winnipeg, but there is always the danger that the medical profession may be exploited in the interests of politics, and find its destinies controlled by political parasites, rather than by competent and independent administrators. In the United States, the profession is unalterably opposed to any system of state medicine, and a somewhat similar situation prevails in Canada.

In the States, efforts have been made to devise a plan under which the medical profession might offer its services to people below a certain income level, upon whom the burden of paying for medical care and associated services often becomes unsupportable. It is to bring before you a plan that superficially has at least been found to work effectively in the state of Washington, that I have asked permission to address your executive today.

First of all may I say that I consider it imperative that the medical profession must plan for the fulfilment of its own economic destiny, enunciate the principles under which it shall offer its services and maintain control of whatever agencies it may set into

operation for providing medical care for the people whom it aims to serve. Certain fundamentals must be maintained. These include the right of choice, and the setting up of competent administrative and judicial tribunals for conducting such services as may be offered to the public.

When in Victoria recently, in association with Dr. Moorhead, I had an interview with the manager of the Washington State Medical Bureau, which operates a system of providing medical care to persons under an income level of $1,800.00 a year, which was organized under the auspices of the profession of that state and is administered under their direction.

The principles under which this plan is operated duplicate in part those which on several occasions I have urged might with advantage be adopted in connection with the Medical Arts Building, as the administrative centre, and were adapted to the needs of the so-called "white collar" class, upon whom the financial burden of paying for medical care falls most heavily, especially when the members are the victims of major illness.

Dr. Moorhead and I felt that your excutive should be familiar with this plan, which—so it is claimed by its promoters—will do away with the spectre of state medicine, and afford a very deserving class of people medical service under a system that recognizes the value of the insurance principle of spreading the risk, and promises to maintain the cost of meeting the economic demands of illness upon a level that the average person can meet. It is suggested that a careful study should be made of the Washington State plan, in order that the members of the Manitoba Medical Association may be familiar with its details, and if thought desirable give it their support, and possibly sanction its establishment upon an experimental basis in the province.

A few of the facts are as follows: 60,000 people are looked after by 400 doctors in the State of Washington.

The centre of administration is in the City of Seattle.

The direction of the system is absolutely in the hands of the medical profession.

Those accepted as beneficiaries of the system do not include the victims of infectious disorders, cancer, T.B., nor is an obstetrical service offered.

Clients are obtained through canvassers, who are paid one month's premium for every insuree obtained.

Doctors are paid $1.80 for office calls, and $12.00 for tonsillectomies. A detailed scale of charges was not available but will be supplied later.

The cost of administration is about 8%

The results so far obtained appear to be satisfactory to the doctors and patients concerned, and a great deal of valuable statistical information is being obtained. The basis of operation is experimental rather than actuarial.

A large proportion of the physical disorders that afflict those insured under the Washington plan can be treated inexpensively and satisfactorily.

The system tends to eliminate the charlatan and the quack in connection with the treatment of persons of limited means.

The manager states that the doctors participating are being paid at this time about 80% of their accounts. He has expressed a willingness to come to Winnipeg and tell us about the system.

The fees paid are somewhat better than those sanctioned by the Compensation Board of the State.

Several doctors from the State of Washington whom I interviewed spoke in terms of the highest praise of the accomplishments of the medical bureau which is conducting this enterprise.

In conclusion let me say that I consider this plan to possess features that are well worthy of investigation, with the idea of adopting it in Winnipeg. It might serve to minimize the demand for health insurance under government control. Indeed were it to be introduced in Winnipeg and efficiently conducted, our government might welcome such a development, as removing a problem from their hands that has proved a source of discord and difficulty in many of our provinces.

(The present rate charged for medical services, etc., under this plan is $1.50 per person per month).

After considerable discussion it was moved by Dr. F. A. Benner, seconded by Dr. S. G. Herbert: That this matter be turned over to the Committee on Sociology for their consideration. —Carried.

There being no further business to come before the Executive, the meeting adjourned.

The Value of Employing Consent Forms for Operations

From "The Canadian Hospital"

The practice of using consent forms, or permits, for operations in our hospitals is generally recognized as being in the best interests of the doctor and the hospital, as well as the patients. When a doctor operates it is not sufficient that he comply with the dictates of good surgery, act reasonably and benefit the patient; the law takes the attitude that except in unusual cases, the patient is the one who has the right to decide what should be done with his body and the surgeon runs a good deal of risk in performing an unauthorized operation. Recently, in order to obtain an idea of the prevailing arrangements in the larger Canadian institutions, the Department of Hospital Service of the Canadian Medical Association sent out a questionnaire to some 20 representative public hospitals in Canada.

From this study it would appear that consent forms of permit for operation are of practical value to the hospital and to the surgeon, and a decided safeguard. They are taken in most cases, and as a rule are signed at the admission office. When the patient has already been "Admitted" the consent is signed at the request of the head nurse or intern by the patient, if possible, or by the husband, father, mother or next of kin. Some hospitals attach the responsibility for explaining the kind of operation, its danger and expected result, to the operating surgeon and expect him to get the "consent" form signed.

In the case of a married woman the form is signed by the husband, and minors must be signed for by parents or guardians. In the case of sterilization, a large western hospital protects itself by the use of a rather elaborate legal form (Figure 1) which the husband must sign, relieving the doctor and the hospital of responsibility.

Hospitals which do not as a general rule require a written permit for an operation on any adult patient, either private or public, do insist on the signature of parent or guardian for an operation on public patients who are minors.

Hospitals have had to face the problem of children sent to hospital from Out-Door Clinics for Tonsillectomy, Circumcision, and so forth, and now insist that the Out-Door Department secure written consent of parents for operation giving the surgeon discretionary powers to do anything further that he deems essential.

Of course, in the case of a sudden and critical emergency, where the health or life of the patient may be endangered due to a delay in obtaining "consent" a surgeon would be justified in performing a major operation without even an implied consent. This applies to a person who is rendered unconscious either by injuries received in an accident, or otherwise, and requires immediate surgical treatment. The surgeon would be justified in applying such medical and surgical treatment as might reasonably be necessary for the preservation of his life or limb. It also covers the case where a consent to a certain operation has been given and in the operation, serious conditions not before anticipated are discovered, endangering the life or health of the patient. Then the surgeon is justified in extending the operation to remove and overcome such conditions. There must, however, be an immediate danger to life or health and no reasonable opportunity of obtaining the consent to the operation.

In a recent Alberta case a surgeon was called upon to treat a patient who had been injured in a motor car accident. The patient asked the surgeon to fix up his hand but not to cut it off. Later on in the operating room the patient repeated his request and the doctor repeated that he would be goverened by the conditions found when the anaesthetic had been administered. The patient said nothing. On examination the doctor found that an amputation was necessary.

On litigation developing, the court refused the physician the amount of his bill and awarded the patient $50.00 damages, the small amount being due to the fact that the loss of the arm was inevitable.

In cases of this sort, it is generally considered that the hospital is not responsible for such operations, but is an independent actor, and the nurses assisting in such cases cease to be the servants of the hospital, because they are under the sole orders of the operation surgeon until the operation has been completely finished.

When replying to our questionnaire, one of our western hospitals, which enjoys the distinction of having a young lawyer as a full-time member of the hospital staff, with office in the business section of the hospital, prepared the following practical rules covering permits for operations:

1. A written consent should be obtained. A verbal consent is legally sufficient but is dangerous because its exact terms are open to discussion.

2. The consent should describe the main operation and include any suspected complications and generally describe the scope of the operation as fully as possible.

3. The consent might be drawn so as to include other unconnected operations which may prove necessary upon incision and which can be done at the same time. This clause should not be too wide in its scope and the power so given should be exercised with great discretion. The situation will be disastrous if patients receive the impression that the form is used to place the patient entirely at the mercy of the surgeon.

4. The consent should contain a statement that the possible results of the operation have been explained to the patient.

5. In the case of a married woman or of an infant the consent should, if possible, be signed by the husband or father. The father's consent will be essential in all cases of young children.

6. The consent should include the hospital.

7. The consent should repeat only what the patient has already consented to in his conversations with the surgeon. It must be remembered that the written consent is only a written record of what has been said. If the patient will not consent to the amputation of a finger, the amputation should not be included in the written consent.

8. Where a surgeon performs an operation without any consent or extends an operation past the scope of an existing consent, he must be prepared to prove, firstly, a sudden and critical emergency, and secondly, that there was no reasonable opportunity of securing a further consent and he must be prepared to prove this before a judicial tribunal in the face of criticism and cross-examination from an adverse cousel, and possibly in the face of adverse opinions from members of his own profession and certainly after the exact results are known and everyone concerned has had a much greater opportunity than he had at the time and after they have had an opportunity of being wise after the event.

9. Where a patient imposes a restiction on the scope of the operation, the doctor must decide whether to withdraw from the operation, to proceed with the operation subject to the limits imposed by the patient or to proceed with the operation, ignore the limits and face a possible claim for damages to which as the Mulloy and Rolater cases show, there is no defence.

Typical forms of consent in use in various hospitals are reproduced herewith:

Permit for Surgical Operation

Patient.....

Date.....

Surgeon.....

Operation.....

.....

Each of the undersigned hereby consents to the above-named surgeon performing upon the said patient the above-mentioned operation; and treating, or operating, for any complicating factors that may arise or be discovered in the course thereof; and performing any further or other operation which may, in his opinion, be necessary; and consents to each of his associates, the..... Hospital (owned and managed by.....), the members of its Attending Surgical and Medical Staff, the members of its Intern Staff and its nurses, employees, and servants, assisting the said surgeon in such operations and treatment; and acknowledges that the nature and possible effects and results of such operation has been explained to each of us.

Witness.....
Patient.....
Witness.....
.....

Husband; Wife; Parent; Guardian.

Notes: Wherever possible, obtain:

1. The consent of the husband to an operation on his wife, even if she is over twenty-one years of age.
2. In the case of a child under twenty-one years of age, the consent of the father, if living, otherwise the consent of the mother, if living, or if neither is living, the consent of the guardian.

I, the undersigned, do hereby give my consent to having an operation performed on..... a patient in Ward.....who is under age.

Witness.....
Parent or Guardian.....
Date.....
Address.....

I hereby apply for the admission of.....
.....
whom I authorize you to place under the care of Doctor .....
and in consideration of such admission, I hereby grant permission for such examination or operation, as may be deemed advisable by the physician or surgeon in charge of the case, and further, I hereby agree to allow the above patient to remain in the Hospital until discharged by the Hospital authorities, or until production of a medical certificate certifying fitness for discharge.

Signed.....
Relationship.....
Signed.....
Relationship.....
Witness.....

In the Matter of.....
.....
I, ...
of ..... in the Province of .....,
make oath and say as follows:—

(1) THAT I interviewed ..... at ..... to-day with regard to her written request of ..... (date) for sterilization;

(2) THAT I explained to her that sterilization would not affect her health adversely, but would mean that in the future, regardless of whether she married or not, she would bear no children;

(3) THAT the said ..... stated that she understood what sterilization meant and that it was her wish to go to the ..... Hospital forthwith to have the necessary operation performed.

SWORN before me at the
....., in the Province of .....
this ..... day of ..... A.D., 193....
.....
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"The Practitioner"—May, 1936.

This number contains a symposium on Diseases of the Skin in which are the following articles:

"The Principles of Diagnosis in Skin Disease,"—by Henry MacCormac, C.B.E., M.D., F.R.C.P., Middlesex Hospital.

"General Principles of Treatment of Some Common Skin Diseases,"—by J. E. M. Wigley, M.B., M.R.C.P., London School of Dermatology.

"Eczema and Its Treatment,"—by A. C. Roxburgh, M.A., M.D., F.R.C.P., St. Bartholomew's Hospital.

"The Treatment of Acne,"—by Sir Ernest Graham-Little, M.D., F.R.C.P., M.P., St. Mary's Hospital.

"Barber's Rash,"—by H. Haldin-Davis, M.D., F.R.C.P., F.R.C.S., Royal Free Hospital.

"Psoriasis and Its Treatment,"—by John Alexander Drake, M.D., F.R.C.P., D.P.H., King's College Hospital.

"Pediculosis,"—by John T. Ingram, M.D., M.R.C.P., General Infirmary, Leeds.

"Bullous Eruptions,"—by J. Goodwin Tomkinson, M.D., Western Infirmary, Glasgow.

"The Practitioner"—June, 1936.

This number contains a symposium on Arterial Disease, included in which are the following articles:

"The Treatment of Patients with Abnormal Blood Pressure,"—by John Hay, M.D., F.R.C.P., Royal Infirmary, Liverpool.

"Arteriosclerosis: General Considerations,"—by Geoffrey Evans, M.D., F.R.C.P., St. Bartholomew's Hospital.

"The Abdominal Manifestations of Arterial Disease," — by C. E. Lakin, M.D., F.R.C.P., F.R.C.S., Middlesex Hospital.

"The Cerebral Manifestations of Arterial Disease,"—by Douglas McAlpine, M.D., F.R.C.P., Middlesex Hospital.

"The Surgical Aspects of Arterial Disease,"—by W. H. C. Romanis, M.A., M.Ch., F.R.C.S., St. Thomas' Hospital.

"The Estimation of Blood Pressure and Its Relation to Life Assurance,"—by Reginald Hilton, M.A., M.D., F.R.C.P., St. Thomas' Hospital.

"The Investigation of Diseases of the Salivary Glands,"—by Reginald T. Payne, M.D., M.S., F.R.C.S., St. Bartholomew's Hospital.

"Interlobar Empyema,"—by Walter Broadbent, M.A., M.D., F.R.C.P., Brighton.

"Spinal Anaesthesia in Peptic Perforations,"—by J. W. Riddoch, M.C., M.B., Ch.B., F.R.C.S., Birmingham.

"The Physical Effects of Conception Control,"—by Frederick J. McCann, M.D., C.M., M.R.C.P., F.R.C.S., F.C.O.G., London.

"Contraception in General Practice,"—by Edward F. Griffith, M.R.C.S., M.R.C.P., Aldershot.

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NEWS ITEMS

The following is Sir George Newman's inaugural address given at Cardiff, Wales, and has been taken from the May issue of "Preventive Medicine," which is published by the New York Academy of Medicine.

"THE NEW PURPOSE OF MEDICINE"

by

SIR GEORGE NEWMAN, G.B.E., K.C.B., M.D.,
Late Chief Medical Officer, Ministry of Health

The science of medicine as we think of it today has emerged slowly, since the dawn of human history, out of a vast and complex medley of human experience, social as well as medical. We, the practitioners of the healing art in one branch or another in the twentieth century, are the indirect descendants of magicians, astrologers, witch-doctors, and priests, and our formulated doctrines derive from primitive folk-medicine and its plant-lore, and from the superstitions, charms, and spells of the ancient world five thousand years before Christ. But we no longer seek guidance from the stars and comets; we do not believe that disease comes by caprice or is caused by evil spirits or angry deities; and we belong to a profession which have transmuted the herbalism, bone-setting, and rude surgery of former ages into a growing and ordered science and art. It is true that all through the centuries its emergence has been permeated, as now, by human fallibility, ignorance, and error, but the history of its advance is, with all its faults, the history of the discovery or application of certain fundamental principles leading to a fuller understanding of the nature of man, of disease and its causation, and of the ways and means by which disease can be controlled and man's survival on the earth made a little less insecure and more purposive. This has been accomplished by the arduous labours of a long line of diligent workers devoted to the search for truth and a way of life. Their journey has never been continuous and not always progressive; sometimes it has been isolated and individual, at other times it has been co-operative, winning the assent of the commonalty of men.

Let me at once commend to all students and practitioners of medicine the essential and invaluable study of this fascinating story of what Osler called "man's redemption of man," one of the greatest stories in the history of mankind, a story of high endeavor of man's mind to find out the secrets of nature and the means of their fuller discovery, interpretation, and use. The history of a science, according to Prof. Sudhoff, is the science, and without regard to history there can be nothing but confusion, misapprehension, and wasted effort in our undertakings.

When we recall the medical practitioner of the ancient world or of the Middle Ages, or even of the Renaissance of the fifteenth century, and contrast him and his profession with the practitioner of our own time, we shall be arrested by the reflection that we are living in a period in the history of man which is characterised by a profound change in the purpose of medicine amounting almost to a revolution. It is becoming more communal and preventive. Not only has there been an enormous advance in knowledge in all branches of medical science, greater in the last hundred years, let us remember, than in all the centuries which preceded them, but two other modern changes have altered the application of such knowledge. The State has also availed itself of such knowledge in the interest of the whole people; and the education of the people themselves has enabled them to appreciate the advantages of such knowledge. It is these three factors which have given the student of this generation a wholly new orientation.

THE MEDICAL CHANGES OF A CENTURY

When, at the end of the fifteenth century, Linacre returned from his sojourn in Italy he was inspired with the idea of reviving English medicine with the Hippocratic learning of the Greeks; he began with the translation of the Greek masterpieces as represented in the writings of Galen; then he established Lectureships in Medicine at Oxford (Merton) and Cambridge (St. John's); lastly, he persuaded Henry VIII. in 1518 to found the Royal College of Physicians in London to introduce Greek Medicine and to regulate the practice of English Medicine. Subsequently the College issued the first official pharmacopœia for the authorization and scrutiny of drugs used in medical practice. A century later, in 1616, Harvey announced to the College his discovery of the circulation of the blood which began modern physiology; Thomas Sydenham (sometimes called the Father of English medicine) introduced Hippocratic principles into his practice in London; lastly, there was the wonderful contribution of the medical practitioners of the eighteenth century. They studied and explored the circumstances of epidemic disease, introduced medical notification, advocated personal hygiene, initiated industrial welfare, reformed midwifery and the care of childhood, established dispensaries, hospitals, and medical schools, and gave to the world both John Hunter and Edward Jenner.

The growth of medical science itself since 1835 is scarcely less impressive than the social and communal impulses which we have noted. There was the introduction of anæsthesia, the "death of pain" as it was called, followed by antiseptic surgery, the defeat of sepsis, hailed as two of the great discoveries of mankind. From 1845 to 1860 came the new knowledge from the labours of Helmholtz, Virchow, Claude Bernard, and Darwin. In that same period there were begun three series of investigations which have carried us whole leagues forward; Claude Bernard proclaimed the constancy of the internal environment of the body maintained by its circulating fluids, Du Bois Reymond opening up the problem of nervous regulation, and Addison that of endocrinology, and the three problems have been advanced and in part resolved in our own generation. There was the rise and rapid advance of bacteriology which opened the door to the work of Pasteur and Koch and their disciples, and in the last twenty years of the nineteenth century the discovery was announced of the bacillary cause of typhoid fever, septicæmia, tuberculosis, glanders, pneumonia, cholera, diphtheria, tetanus, meningitis, plague, and dysentery, and a little later came the spirochæte of syphilis. In 1895 came the unveiling of the body by the X ray; in 1898 Manson and Ross discovered the cause and vehicle of malaria; in 1900 the Curies isolated radium; and in the last thirty years we have seen that man himself is no longer the microcosm but the cell of which he is built is the unit. The cell, its content, its function, and its secretion, has become so vitally important that by its smallest deviation man's body may be profoundly changed, or even destroyed, by its own household. The advance of bacteriology has not only revealed the ætiology and viruses of infective processes but has opened the doors of immunology far wider than did Edward Jenner, providing us not only with vaccines and serums, but with diagnostic means of clinically estimating immunity. Physiologists and biochemists have eluciated the existence and character of the hormones in the body, finding their amazing power of control of the body to be second only to that of nervous regulation; and in the world of nature have similarly been disclosed the vitamins;

and as a result, we are now furnished with chemical and biological means of treatment and prevention. In 1909 Ehrlich gave us salvarsan as the chemical answer to syphilis, and in 1922 Banting furnished insulin as the biological answer to diabetes, and to these must be added medication by thyroid, adrenaline, pituitrin, liver extract, etc. We have in three generations seen almost a new body unveiled for man, and have begun to learn how to control his life. We are living witnesses of what Sir Clifford Allbutt called "a new birth of medicine."

What does all this mean for us?

It means that in our day the science and art of medicine has arrived at a new position of immeasurable gain and advantage as compared with the past. We can now become, if we will, fuller interpreters of Nature, the heralds and agents of powers of control of the body undreamed of by our forefathers. In a word, the new purpose of medicine is the prevention of disease in the individual and the community, and the raising of the whole standard of physical life and human capacity.

Let me submit for your consideration three reflections.

THE MAINTENANCE OF HEALTH

First, the art of medicine must direct its energy and knowledge to the maintenance of health. One of the recent changes that has come over the teaching of medicine is the necessity of studying anatomy, physiology, and even biochemistry in the normal living body, for the cadaver cannot be a vital index. We know that disease is a disharmony of the living body, its discomfort and dis-ease, its reaction to the constant internal environment of Claude Bernard and to the variable external environmet which surrounds us—soil, air, water, climate, occupation, habits, and the agents of infection. One of the great lessons of the Greeks was that the body itself could often harmonise its disharmony, provided it could function normally. Now the normal body requires two natural conditions for its survival, functioning, and health—viz.: nutriment in the form of oxygen and nutritious food, and effectual exercise of all its parts and faculties. From the earliest times, however, the custom and education of the medical man has concentrated on morbidity, and this was reasonable as disease is the enemy of health. But it is not the only enemy, not the only criterion or agency of disharmony. There may be physiological disharmony.

My submission is that doctors should enlarge the narrow purpose of directing their almost exclusive attention to morbid conditions and the remedy of such conditions mainly by means of drugs. Unfortunately this tendency in professional custom has misled public opinion, and the patient himself becomes accustomed to think in terms of disease and of drugs. Hence, there has risen a pernicious and false reliance on the "bottle of medicine." Drugs are sometimes necessary and a pharmacopœia is required. But medication by drugs is, like patriotism, not enough (or easily too much), and we must not lose our way in this direction, or surrender our common sense and neglect our new knowledge and better methods. If I may say so, the wide-spreading fetish of quackery in its manifold forms may be partly due to the unconscious misdirection of doctors themselves. People are beginning to feel that they need something more than the doctors are giving them and therefore look elsewhere.

Thus a reaction is setting in. On all sides the community is begging for instruction and guidance from the medical profession as to health, something much larger than the negation of disease. On scientific grounds we know the common sense of this demand, and we should do wisely to meet it more fully. We know it is sound, because health of body means increase of capacity, physical and mental, for work and for the enjoyment of life; it means a stronger and better population, now and in the future; it means increased power to resist or overcome disease; and it means the prolongation of life and the postponement of death.

I should like to see two things happen. First, that in every medical school there should be definite and skilled instruction in the applied physiology of the nutrition of the body (including dietetics), of ways and means of the effective oxygenation of the body, of assessment of fitness, physique, and capacity, and of all forms of physical education. This would encourage both the doctors and their patients in the new orientation of medicine. In some medical schools this is already undertaken, but it should be universal, and taken in hand by a clinical physiologist. Secondly, that every medical practitioner should actually include the practice of this form of clinical medicine. Mark this fact, every patient needs health guidance. Directly or by implication every patient, coming for the first time to his doctor, asks these four questions: "What is the matter with me; can you cure it; how long shall I have it; how can I avoid getting it again?" Here is diagnosis, treatment, prognosis, prevention. Each of these questions is of importance to the patient, but I invite you to consider the vast realm of medicine, and of invaluable service to the patient, which opens before you in providing a correct answer to the fourth question. In passing, you will observe that the patient, following his primitive ancestors, thinks of his malady as "it," something separate from himself an entity, an unlucky acquisition. But as we all know his malady is himself, a personal disharmony of his total ego. Disease is rarely singular, and perhaps never an entity. It is the man himself, his heredity, temperament, habits, way of life, perhaps even his religion, that is your patient.

Does the average busy practitioner actually advise upon or prescribe for the patient's way of life, his ineffectual use of diet (food and drink), fresh air, exercise, and rest? Has the doctor carefully considered the physiological effect of these five factors on his patient, on his heart, lungs, stomach, kidneys, on his nervous system, or his endocrine glands? Does he really answer the patient's fourth question, or does he evade it? Does not part, or the whole, of the patient's malady lie quite beyond medication by drugs? Is it not expedient that the patient, and indeed the normal person, should be able to obtain sound advice on health from the medical profession? Should not every practitioner be a missionary of health and prevention, a doctor and teacher of his patients in the true sense? It is certain that he could do more good in five minutes with his patient than any other educational agency, formal lectures, textbooks, or Acts of Parliament. In a word, I have been long convinced that medical practitioners ought to be, and often are, the first effective teachers of hygiene to a people, the principal interpreters of preventive medicine in England, for through their hands pass one-third of the whole population every year.

NEED FOR MORE PREVENTIVE MEDICINE

Although the death-rates in this country are exceptionally low, and lower than in most countries of the world, and the national health has steadily improved and stands higher today than at any previous time in our history, and although England has banished leprosy, plague, cholera, epidemic enteritis, endemic scurvy, typhus, and other scourges, and although the nation is spending lavishly on social welfare, there is still great need for further progress in preventive medicine and its research. We have as a nation by no means solved all our health problems, and our industrial and social evolution seems to bring new ones. The physique of children, although improving, leaves much to be desired, and that of youths from 14 to 18 years of age shows some signs of actual deterioration in certain districts; nutrition has steadily improved, but is still very unsatisfactory in some groups of the population; the common cold,

bronchitis, and dyspepsia continue prevalent, costly, and disabling, yet all three are among the most preventable of maladies; influenza, "rheumatism," and cancer remain undefeated, and diseases of the heart and circulation claim 130,000 lives a year (much the highest certified cause of death); maternal mortality remains static at about 1 death in 200 mothers confined and shows as yet no reduction; the dental condition of the people is very much below par and results in unfortunate sequelæ; and too much attendance upon the sick is directed merely to drugs and ineffectual advice rather than to personal hygiene and a sound way of living. It must be added that the burden of incapacitating sickness and accident continues to be unduly heavy, costs the nation annually millions of pounds, and deprives industry of many thousands of years of lost time from work—in 1933, 29 million weeks were thus lost. The great bulk of this current sickness and accident is directly preventable by a sensible, intelligent, and civilized people, but it is not prevented. These are serious facts for the consideration of the profession. We cannot ensure a healthy nation only by "bottles of medicine," modern surgery, and artificial immunization. A fuller and deeper appreciation of positive and constructive health is necessary.

In the light of these facts I venture to hope that the medical profession will steadily continue to close its ranks and work together as one body for the unity of medicine. It has in practice two aspects or wings, curative and preventive, between which there is now no call whatever for any sort or degree of conflict or competition. They are complementary and belong to each other, as the wings of a bird. They need each other, and the community needs both. Moreover, the medical practitioner is the outpost of both. We must use the new knowledge so rapidly extending in order to serve the national health. In doing so, we should remember that the social, æsthetic, psychological, and religious aspects of man's health or wholeness cannot wisely be disregarded. They form an integral part in the formation of those common standards of aspiration, discpline and conduct, so greatly needed by the nation today, and so essential to national health. Among such standards, to be accepted by the public and to be vigorously supported by the medical profession, none seem to me to be more vitally important that the urgent national need for the physical and health education of youth.

COMMUNICABLE DISEASES REPORTED
Urban and Rural - June, 1936.

Occurring in the Municipalities of:

Measles: Total 608—Winnipeg 195, St. Laurent 68, Unorganized 57, Shoal Lake R. 44, Lawrence 37, St. Boniface 10, Portage la Prairie City 9, McCreary 6, Dauphin Town 5, Kildonan Old 5, Selkirk 4, St. Andrews 4, St. Vital 3, Cameron 3, Flin Flon 2, Hamiota Village 2, Norfolk North 2, Siglunes 2, Strathclair 2, St. Clements 2, Brandon 1, Brooklands 1, Fort Garry 1, Hamiota Rural 1, Kildonan East 1, Macdonald 1, Rapid City 1, Shoal Lake Village 1, St. James 1, Late Reported: February, Pembina 1, March, Hanover 1, April, Hanover 1, Rosser 1, May, St. Andrews 31, Unorganized 28, Shoal Lake Rural 26, St. Laurent 18, Flin Flon 14, St. Boniface 7, Siglunes 3, Brooklands 2, Dauphin Town 1, Lawrence 1, Selkirk 1, Springfield 1.

Scarlet Fever: Total 293—Winnipeg 257, Kildonan East 12, St. Vital 8, St. Boniface 5, St. James 3, Brandon 1, Fort Garry 1, Kildonan West 1, Mossey River 1, Oakland 1, Ritchot 1, Rosser 1, Winnipeg Beach 1.

Chickenpox: Total 162—St. Vital 60, Winnipeg 54, St. Boniface 22, Gilbert Plains Rural 7, Gilbert Plains Village 6, Kildonan East 5, St. James 4, Brandon 3, Late Reported: May, Kildonan East 1.

Tuberculosis: Total 87—Winnipeg 13, Unorganized 6, St. James 4, Brandon 3, Brokenhead 3, Dauphin Rural 3, St. Andrews 3, St. Boniface 3, Whitehead 3, Ellice 2, Flin Flon 2, Hanover 2, Rockwood 2, Springfield 2, St. Clements 2, St. Vital 2, Transcona 2, Whitewater 2, Winnipegosis 2, Bifrost 1, Blanchard 1, Brooklands 1, Cornwallis 1, Cypress South 1, Daly 1, Dauphin Town 1, Eriksdale 1, Ethelbert 1, Fort Garry 1, Grey 1, Lac du Bonnet 1, Lorne 1, Norfolk North 1, Rhineland 1, Rivers Town 1, Riverside 1, Roblin Town 1, Roland 1, Selkirk 1, Shell River 1, Sifton 1, Strathclair 1, Ste. Anne 1, Turtle Mountain 1, Westbourne 1.

German Measles: Total 79—Brandon 26, Kildonan East 6, Selkirk 5, St. Boniface 5, Roland 4, Rosser 4, St. Andrews 3, St. James 3, The Pas 3, Rockwood 2, Unorganized 2, Whitehead 1, Late Reported: May, Lawrence 8, The Pas 4, Selkirk, 3.

Mumps: Total 51—Winnipeg 27, Unorganized 7, Ethelbert 2, Hamiota Rural 1, Kildonan East 1, Norfolk North 1, Siglunes 1, St. James 1, The Pas 1, Woodlands 1, Late Reported: May, Kildonan East 8.

Influenza: Total 49—Late Reported: January 6, Coldwell 1, Morris Rural 1, Rosedale 1, Unorganized 1, Whitemouth 1, Woodlands 1, February 6, Brandon 2, Gladstone Town 1, Ritchot 1, Strathcona 1, St. Francois Xavier 1, March 21, Brandon 2, Pipestone 2, St. Andrews 2, Coldwell 1, Cypress South 1, Dauphin Rural 1, Garson Village 1, Gilbert Plains Village 1, Gimli Rural 1, Hamiota Rural 1, Hanover 1, Minnedosa 1, Morris Town 1, Norfolk South 1, St. James 1, Unorganized 3, April 16, Dauphin Rural 3, Bifrost 2, Hanover 2, Archie 1, Brandon 1, Minitonas 1, Norfolk North 1, Rhineland 1, Sifton 1, Ste. Anne 1, Ste. Rose 1, St. Vital 1.

Whooping Cough: Total 19—Winnipeg 12, Ellice 1, Portage la Prairie City 1, Unorganized 1, Late Reported: January, Unorganized 1, March 3, Grandview Rural 1, Unorganized 2.

Diphtheria: Total 11—Winnipeg 8, Whitemouth 1, Franklin 1, Late Reported: May, Langford 1.

Erysipelas: Total 10—Winnipeg 7, St. Vital 1, St. Boniface 1, Fort Garry 1.

Typhoid Fever: Total 6—Brandon 2, Dufferin 1, Pipestone 1, Late Reported: May, Siglunes 2.

Anterior Poliomyelitis: Total 3—Morton 2, Grey 1.

Cerebrospinal Meningitis: Total 2,—Winnipeg 1, Late Reported: May, Selkirk 1.

Lethargic Encephalitis: Total 2—Montcalm 1, Late Reported: February, Unorganized 1.

Puerperal Fever: Total 2—Silver Creek 1, Winnipeg 1.

Undulant Fever: Total 2—Winnipeg 1, Late Reported: May, Whitewater 1.

Anoebic Dysentery: Total 1—Late Reported: February, Souris 1.

Typhoid Carrier: Total 1—Westbourne 1.

Venereal Disease: Total 130—Gonorrhoea 92, Syphilis 38.

DEATHS FROM ALL CAUSES IN MANITOBA
For the Month of May, 1936.

URBAN—Cancer 32, Pneumonia 18, Tuberculosis 6, Measles 4, Syphilis 3, Influenza 2, Scarlet Fever 2, Diphtheria 1, Lethargic Encephalitis 1, Puerperal Septicaemia 1, Typhoid Fever 1, Whooping Cough 1, Erysipelas 1, all others under 1 year 5, all other causes 146, Stillbirths 19. Total 243.

RURAL—Cancer 29, Tuberculosis 20, Pneumonia 18, Influenza 5, Measles 3, Syphilis 2, Infantile Paralysis 1, Lethargic Encephalitis 1, Puerperal Septicaemia 1, all others under 1 year 7, all other causes 168, Stillbirths 14. Total 269.

INDIAN—Tuberculosis 5, Pneumonia 4, Influenza 2, all other causes 11. Total 22.

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Clinical Section

The Ambulant Treatment of Hernia

By

T. E. HOLLAND, B.Sc., M.D., F.R.C.S. (Edin.)

The ambulant treatment of hernia by injection is not a new method. As long ago as 1835 Valpeau (1) successfully treated hernia by injection of iodine. Other surgeons published reports on their use of the method at intervals during the last century. Various solutions were used, such as Lugol's solution, 70% alcohol, fluid extract of the bark of Quercus Albus or White Oak, 10% Zinc Choride, and so on. Uniformly good results were obtained, but in spite of this the method has failed to come into general use. The reason is pointed out by Mayer (2) who states that following publication of Warren's book (3) in 1881 on the injection method, various formulae for cure of hernia appeared on the market. Exaggerated claims were made for these, some even claiming that a single injection would bring about a cure. The composition of these formulae was kept secret and they sold at fabulous prices. One doctor in Chicago and two others in a town in New York State sold territories for the exploitation of their secret formulae, the prices ranging from five hundred to two thousand dollars. The formulae were sometimes sold to physicians who knew little of surgery and less of anatomy and who failed to realize that the injection method required skill in its application. The method was also immediately taken up by irregular practitioners everywhere who also possessed but little skill and as a consequence, the method itself was brought into undeserved disrepute.

In more recent years further work has been done and good results obtained. Mayer of Detroit in 1927 reported results of thirty years' use of the method in which 2,100 cases were treated with less than 2% recurrence. During the past four or five years, special work has been done by Drs. Bratrud (4) and McKinney and by Dr. Carl Rice (5) in Minneapolis, to put this work on a more scientific bases and it is their method which I have been using during the past year.

The object of this method of treatment is the introduction of a suitable substance which will produce proliferation of fibrous tissue in the inguinal canal which will effectually close the canal and prevent any protrusion from the abdomen, which is exactly what we aim to do by operation. My remarks in this paper will be limited to treatment of herniae of the inguinal types as my experience so far is limited to these types. Umbilical and femoral hernia have been treated by others but the results have been in some cases, less ssuccessful.

The prime requisites for this treatment are (1) that the hernia is entirely reducible and (2) that reduction may be maintained by use of a suitable truss. This truss must be worn night and day during the period of treatment and for two to three months after injections are completed.

The proper fitting of the truss is one of the most important parts of the treatment and one in which little or no instruction is given in medical schools. It is an art which can be learned only by experience and which for present purposes must be done by the surgeon himself.

The type of truss used must be varied to suit the individual patient. The most satisfactory is one of the spring types with a pad large enough to close the abdominal inguinal ring and keep the walls of the inguinal canal in apposition. In some patients with narrow hips the spring type sometimes tends to slide upwards over the iliac crests and an elastic type of truss is found more satisfactory.

Some trusses made of vulcanite are not affected by water and permit the patient to take a bath. A temporary truss of soft rubber may be substituted while bathing but the majority of patients must content themselves with a sponge bath while this treatment is in progress. It is necessary for a patient who has never worn a truss to do so for a week or ten days before injections are commenced, and my practice is to see the patient every day if possible to make corrections in the fitting of the truss until it is perfect. The first few days of wearing a truss very often produce excoriation of the skin which must be well hardened before beginning injections. A patient should not be conscious of the presence of a well fitting truss.

The solutions used have been improved considerably during the past few years. The desirable attributes of a good solution are (1) that it be practically painless when injected, (2) that it produce effective proliferation of fibrous tissue, (3) that there be a minimum amount of exudative reaction and (4) that it produce no systemic reaction.

A solution which has been extensively used is that of Pina Mestre (6) of Barcelona, Spain, who published results in 8,000 cases treated with his solution, which is composed of a number of vegetable tinctures, all of which contain some form of tannic acid and of course alcohol.

Another solution which has been used quite successfully in Minneapolis:

Phenol	2 parts
Alcohol	1 part
Lloyds Spec. Tr. of Thuja	1 part

This solution is irritant and requires injection of novocaine before injecting the solution. The amount used is 5 to 10 minims.

The solution used now by Drs. Bratrud (4) and McKinney is a distillate of several botanical herbs to which is added 0.1 per cent of tannic acid and 0.5 per cent Thymol. This is called Proliferol and is made by Ulmer Pharmacal Co., Minneapolis. The solution I am using at present is 5% sodium psylliate, a sodium salt of a fatty acid which produces satisfactory results and requires no preliminary local anaesthetic.

The patient is treated in the recumbent position. The same aseptic precautions are taken as for a major surgical operation. The skin is sterilized with acriflavine solution and a sterile 5 c.c. syringe and 2½ inch, 22 gauge needle, is used. The needle is passed obliquely through the skin, then through the fascia of the external oblique muscle, which is recognized by a distinct sense of resistance being encountered, followed by a sense of release. The needle is directed downwards and medially so as to avoid penetrating the peritoneum. After injecting the solution the needle is withdrawn and pressure applied to prevent seepage along the needle track. The truss is then carefully applied and the patient allowed to go.

Treatments are given at intervals of two days, using 2-3 c.c. at each sitting. For the indirect type, the first injection is placed at the abdominal inguinal or internal ring. The second is placed deep to the cord in the region of the internal ring. The injections then proceed down the canal, finally closing the subcutaneous inguinal ring. It is important that the injections above and behind the cord be placed on the fascia Transversalis which forms the posterior wall of the canal. The average number of injections required is 9 or 10, some requiring less, others more.

The Direct Inguinal Hernia, which is the type we find when a hernia recurs after operation, is the one in which I think the injection treatment is specially valuable. Five out of the twenty five cases which I have treated have had a previous operation, recurrence taking place from two months to fifteen years later. The operation for a recurrent hernia is difficult and the results are notoriously bad. By injection it is possible to build up a wall of fibrous tissue where the hernia has passed through the Fascia Transversalis and the Falx Inguinalis and cure the hernia. In this type the injections are begun in the lower part of Hesselbach's Triangle and placed at regular intervals until the area is solid right down to the Subcutaneous Inguinal Ring. Usually more injections are required than in the Indirect type.

There are certain contraindications to this method which are as follows:

1. Irreducible or Incarcerated Hernia, or those associated with an undescended testicle.

2. Sliding hernia. It is doubtful if one can fit a truss which will control a sliding hernia.

3. Syphilis, tuberculosis and diabetes.

4. Carcinoma and any condition producing ascites.

5. Haemophilia.

6. Incisional Herniae, in which omentum or bowel may be present and adherent.

The age of the patient is not important in that cases have been done from 18 months of age to 80 years of age. In elderly people who are prone to develop chest symptoms and other post-operative complications, it is the method of choice.

Complications:

The most common complication is an induration of the cord, which is tender and quite localized. This has been proven to be due to an inflammatory reaction with exudation into the almost obliterated sac. It disappears gradually during 3-4 weeks.

Another complication which is very alarming to both patient and physician develops when the solution is placed in or near the peritoneal cavity. A fairly severe reaction comes on before the patient is off the table, characterized by severe pain, cold sweat, pallor and faintness. No change in pulse or blood pressure occurs and the symptoms gradually pass away in 20-30 minutes. I have had this happen only 4 times in over 200 injections. Two of these were in the same patient. No serious consequences resulted and the effects have been attributed to a chemical peritonitis as proven by laparotomy in cases in Minneapolis.

A case reported in the south treated by a doctor not surgically trained, developed abdominal pain and rigidity. Laparotomy revealed a loop of gangrenous small intestine which required resection. This was attributed to injection of the mesentery through faulty technique.

For a surgeon with a good knowledge of anatomy, who will take a little time and trouble to learn the technique, this method should be eminently safe. The position of the needle point must be accurately known at all times. The importance of structures such as the Peritoneum, Inferior Epigastric, External Iliac and Femoral Vessels, and the Spermatic Cord make this imperative but with an intimate knowledge of the anatomy of the region and use of the surgical landmarks, the operator should not encounter any serious difficulties.

The patient does have a certain amount of pain which varies in amount as does the individual reaction, some cases having very little, others experiencing aching type of pain for 4-5 hours after treatment, but very rarely is a patient obliged to lay off work and then not longer than a half a day or a day.

The histology of the method has been carefully worked out by Dr. Carl Rice (5) of Minneapolis. First working on dogs he demonstrated that injection into (1) the cord, did not produce obliteration of the Vas Deferens; microscopic section showed it to be normal in appearance and there was no sign of any obstruction. (2) into a vein, did not produce any serious systemic reaction and (3) into the peritoneum, while producing

pain, did not produce any more than a chemical peritonitis of which no trace existed when laparotomy was performed 24 hours later. No case of occlusion of the Vas Deferens is known nor has any case of atrophy of the testicle been reported.

In human beings Dr. Rice was able to secure biopsies in patients who either were uncertain as to whether they wanted their hernias treated by operation or by injection, or having had one or two injections, decided to have the operation. These were admitted to hospital at intervals so as to secure a sequence of histologic changes from 24 hours to forty-two days after injection of the irritating solution.

Microscopic sections of these biopsies show very strikingly the changes occurring at the site of injection over a period of six weeks. The section taken 24 hours after injection shows young fibroblasts present, also fixed connective tissue cells, round cells and polymorphs. Seven days after injection we find the fibroblasts more evident, new blood vessels are making their appearance and no polymorphonuclear leucocytes are to be seen. This is of special interest in that it denotes the satisfactory formation of new fibrous tissue without the severe irritation and consequent polymorphonuclear leucocytosis which sometimes proceeded to formation of a sterile abscess when some of the older solutions were used.

Section taken 11 days after injection shows increasing fibrosis while the 14 day section shows even denser fibrous tissue; new blood vessels are prominent and there is an occasional round cell but no polymorphs.

In the 23 day section there is seen further progress and the abundant fibrous tissue is seen to be wavy. The final section in this investigation was taken 42 days after injection and we have a picture of dense fibrosis with a strong compact appearance.

Results:

The results obtained through a careful study of about 6,000 cases treated by the injection method in the United States during the past few years, indicates 92% of cures. A comparative study of the operative method was obtained in 1,100 cases which showed only 80% of cures. This seems a very low figure and one which I should expect to be disputed and yet I think it is agreed by all surgeons that recurrence in hernia is a very difficult thing to assess. If a patient has a recurrence he very often goes to another surgeon, so that the original operator has no accurate knowledge of his percentage of recurrence. I cannot say if I have any recurrences to my credit from the operative method but using Gallie's method of fascial repair I do not think recurrence would amount to 20% or even 5%. Dr. Fraser of the Workmen's Compensation Board estimates recurrence at about 10% which should be a reliable figure for Manitoba.

With regard to the cases which I have treated by the injection method, sufficient time has not elapsed to draw any definite conclusions. I have treated twenty-five herniae in 22 patients. Of these there have been two recurrences but these were the first two cases I treated and were caused by faulty technique, due to inexperience. The first, a man of 64 years of age, had had an operation 15 years ago. It had recurred one year ago, as a direct hernia, and in carrying out treatment I did not place a sufficient number of treatments in Hesselbach's Triangle to bind the Fascia Transversalis and conjoined tendon down. The second case I believe was due to insufficient treatment at the abdominal Inguinal Ring. Each case has had further treatments and now appears to have an excellent result. It is interesting to note that in Minneapolis during operation for acute appendicitis in patients previously treated for hernia, nothing but a slight dimple has been observed at the Internal Ring and the finger tip could not be pushed through the ring.

The patients have all been very pleased with the treatment. The advantages, provided the results are comparable to those with the surgical method, are obvious. The patient requires no hospitalization, no anaesthetic, and no operation. He receives his treatment and continues at his work thereby, saving 6 to 8 weeks' salary.

One patient, a commercial traveller, 45 years of age, had had a hernia for 10 years and had neither the time nor the inclination to have an operation. He was fitted with a truss, wore it for 2½ weeks while on a business trip in the United States and treatments were started on his return. He was here for three weeks during which his treatments were completed. He said he felt so much better and had so much more energy that he was almost afraid to go out on his next trip!

While many patients will prefer an operation and have it over with, there are many others who either from their financial circumstances, their occupation, or from what they call "the fear of the knife," avoid an operation, and I feel that if a surgeon by a method of treatment which proves equally effective, is able to save his patient an operation, it is his duty to that patient to do so.

While the method cannot be held to replace surgery entirely, it is a procedure which the surgeon may adopt in many cases with definite advantage to his patient.

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